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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,337	03/23/2004	Toyohiko Youan	040145	2202
23850	7590	11/22/2005	EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP			SINGH, SUNIL	
1725 K STREET, NW			ART UNIT	
SUITE 1000			PAPER NUMBER	
WASHINGTON, DC 20006			3673	

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/806,337	YOUAN, TOYOHICO	
	Examiner	Art Unit	
	Sunil Singh	3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 4-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan (2003-086344) on 3/26/03. It is noted, however, that applicant has not filed a certified copy of the above mentioned application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott (US 2349033) in view of Cherrington et al. (US Re. 33793).

Elliott discloses a pipe burying method for burying a pipe in the earth by using a reamer (see Fig. 1 & 4 for a first type of reamer and Fig. 3 for a second type of reamer), the method comprising the steps of: preparing various type of reamers (see Fig. 1 & 4 for a first type of reamer, note in Figure 4, member (55) is consider to be reaming the pilot borehole created by members (34,35) and Fig. 3 for a second type of reamer), selecting (see col. 2 lines 35-70) at least a reamer suitable for a soil type from among the various types of reamers based on the type of soil to be bored; connecting the selected reamer to a front end of a rod in a pilot hole in the earth and to the pipe (see

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Fig. 3); pulling out the rod from the pilot hole while pulling the reamer and burying the pipe connected to the reamer in the earth. The reamer has a reamer main body that is approximately cone-shaped, with a diameter which contracts towards a side of the pilot hole from which it is retracted (see Fig. 3), and a platy member connected to the outer surface of the reamer main body to form a drilling part, the various types of reamers being prepared by connecting the various types of platy members to the reamer main body (see Fig. 1 & 4 for a first type of reamer with platy members and Fig. 3 for a second type of reamer with platy members). Elliott discloses the invention substantially as claimed. However, Elliott does not install his pipe by rotating means instead Elliott uses percussive means. Cherrington et al. teaches to install pipe by rotating means (see col. 8). It would have been considered obvious to one of ordinary skill in the art to modify Elliott by substituting the rotating means as taught by Cherrington et al. for the percussive means disclosed by Elliott since this is an obvious design to choice.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott '033 in view of Cherrington et al. '793 and Stephenson et al. (US 5799740).

Elliott discloses the invention substantially as claimed (see Fig. 3). However, Elliott does not install his pipe by rotating means instead Elliott uses percussive means. Further, Elliott is silent about preparing various platy members and selecting a particular platy member depending on soil type. Cherrington et al. teaches to install pipe by rotating means (see col. 8). Stephenson et al. teach preparing various platy members and selecting a particular platy member depending on soil type (see col. 10 lines 15-30).

It would have been considered obvious to one of ordinary skill in the art to modify Elliott by substituting the rotating means as taught by Cherrington et al. for the percussive means disclosed by Elliott since this is an obvious design to choice. It would have also been considered obvious to one of ordinary skill in the art to modify Elliott and include preparing various platy members and selecting a particular platy member depending on soil type as taught by Stephenson et al. since this facilitates versatility, meaning one would not need to invest in a plurality of boring heads.

Response to Arguments

5. Applicant's arguments with respect to claim 4 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's arguments filed 8/30/05 have been fully considered but they are not persuasive. Applicant argues that Elliott fails to teach a reamer. The examiner disagrees. Applicant is directed to Figure 1 & 4 wherein one type of reamer is provided, note in Figure 4, member (55) is consider to be reaming the pilot borehole created by members (34,35). Another type of reamer is depicted in Figure 3. Applicant further argues that there is no teaching of selecting a reamer type based on soil type. This is not concurred with. Applicant is directed to col. see col. 2 lines 35-70 of Elliott wherein reamer type shown in Figs. 1 & 4 is used in one type of soil, while another type of reamer as depicted in Fig. 3 is used in another type of soil.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (571) 272-7049. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sunil Singh
Primary Examiner
Art Unit 3673



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11/10/05